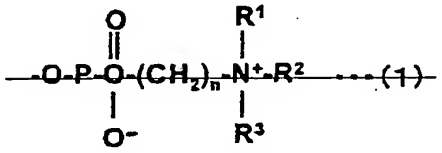
AMENDMENTS TO THE SPECIFICATION

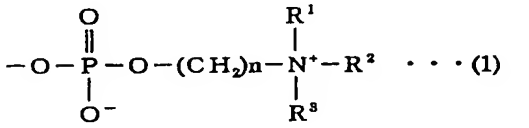
Please replace the paragraph bridging pages 2 and 3 with the following rewritten paragraph:

For embryoid formation, so-called a "hanging drop method" is widely used, which is devised to prevent adhesion of ES cells to a culture vessel. There are known hanging drop method 1, wherein ES cells are added to and cultured in the drops having from the lid of a glass container, and hanging drop method 2, wherein ES cells are placed over mineral oil previously placed in a culture vessel, and cultured. ~~In hanging drop method 1, however, the hanging drops must be prevented from falling, or the interface between the mineral oil and the overlaid cell suspension must be prevented from being disrupted, which causes extreme complexity in culture preparation and handling. In hanging drop method 2 using mineral oil, on the other hand, no microscopic examination is allowed before the generated embryoid bodies are transferred to another culture vessel, which impedes researches in embryogenesis.~~ In hanging drop method 1, however, the hanging drops must be prevented from falling which causes extreme complexity in culture preparation and handling. In hanging drop method 2 using mineral oil, on the other hand, the interface between the mineral oil and the overlaid cell suspension must be prevented from being disrupted, and also no microscopic examination is allowed before the generated embryoid bodies are transferred to another culture vessel, which impedes researches in embryogenesis.

Please replace the paragraph bridging pages 4 and 5 with the following rewritten paragraph:

According to the present invention, there is provided a vessel for embryoid formation for use in floating culture of embryonic stem cells (ES cells) to form embryoid bodies, comprising a coating layer formed from a compound having a phosphorylcholine-like group represented by the formula (1) (abbreviated as PC-like group hereinbelow), on a vessel surface defining a region for floating culture of ES cells:





wherein R^1, R^2, and R^3 are the same or different groups, and each stands for a hydrogen atom, an alkyl or hydroxyalkyl group having 1 to 6 carbon atoms; and n is an integer of 1 to 4.

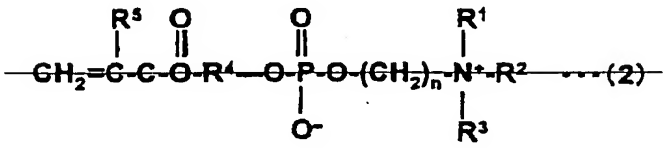
Please delete the second full paragraph on page 5, lines 15-20:

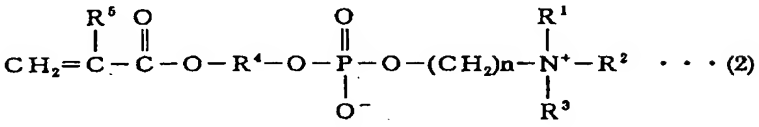
~~According to the present invention, there is also provided use of a vessel for embryoid formation for floating culture of ES cells to form embryoid bodies, said vessel comprising a coating layer formed from a compound having a PC-like group represented by the formula (1), on a vessel surface defining a region for floating culture of ES cells.~~

Please replace the paragraph bridging pages 7 and 8 with the following rewritten paragraph:

The polymer having a PC-like group may be any polymer as long as it has a PC-like group represented by the formula (1), and may preferably be, for example, at least one of a

homopolymer of monomer (M) represented by the formula (2) having a PC-like group, and a copolymer of monomer (M) and another monomer:





wherein R^1, R^2, R^3, and n are the same as those in the formula (1); R^4 stands for an alkyl group having 1 to 6 carbon atoms; and R^5 stands for a hydrogen atom or a methyl group.

Please replace the paragraph bridging pages 14 and 15 with the following rewritten paragraph:

Synthesis Example 1

35.7 g of MPC and 4.3 g of n-butylmethacrylate (BMA) (MPC/BMA = 80/20 (by molar ratio)) were dissolved in 160 g of ethanol, placed in a four-neck flask, and bubbled with nitrogen for 30 minutes. 0.82 g of azobisisobutyronitrile was added at 60 °C, and reacted for polymerization for 8 hours. The obtained polymer liquid was added dropwise into 3L of diethyl ether under stirring, and the resulting precipitate was recovered by filtration, and vacuum dried at room temperature for 48 hours, to obtain 29.6 g of powder. The weight average molecular weight of the obtained powder measured by GPC under the following conditions, was found to

be 153000. Compositional analysis by ^{1}H-NMR revealed that MPC/BMA = 80/20 (by molar ratio). The powder is designated as copolymer (A).

<Conditions of GPC>

(1) Sample: A sample was dissolved in a chloroform/methanol (6/4 (by volume)) mixed solvent containing 0.5 wt% lithium bromide to prepare a 0.5 wt% polymer solution. The amount of the sample solution used was 20 L.

(2) Column: Two PLgel 5 μm ~~MIXEDC-C~~ MIXED-C columns arranged in series (manufactured by POLYMER LABORATORIES LTD.) were used at a column temperature of 40 °C, and a molecular weight calculating program with integrator (GPC program for SC-8020) manufactured by TOSOH CORPORATION was used.

(3) Eluting solvent: A chloroform/methanol (6/4 (vol%)) mixed solvent containing 0.5 wt% lithium bromide was used, at a flow rate of 1.0 mL/min.

(4) Detection: Differential refractive index detector

(5) Reference material: Polymethylmethacrylate (PMMA) (manufactured by POLYMER LABORATORIES LTD.)

Please replace the second full paragraph on page 20 with the following rewritten paragraph:

Examples 2-2 and 2-3

The experimental procedures of Example 2-1 were followed, except that vessel (A) for embryoid formation was replaced with vessel (B) or (C) for embryoid formation prepared in Example ~~2-2 or 2-3~~ 1-2 or 1-3, respectively. The results are shown in Table 2.

Please replace the paragraph bridging pages 20 and 21 with the following rewritten paragraph:

~~Comparative Example 2~~ Comparative Example 2-1

The experimental procedures of Example 2-1 were followed, except that vessel (A) for embryoid formation was replace with an untreated 96-well polystyrene plate. The result is shown in Table 2. Further, the development of embryoid bodies was observed under a phase contrast microscope. A photocopy of the phase contrast micrograph is shown in Fig. 2.

Please replace the second full paragraph on page 23 with the following rewritten paragraph:

~~Comparative Examples 3-2 and 3-2~~ Comparative Examples 3-2 and 3-3

The experimental procedures of Example 3-1 were followed, except that the embryoid bodies prepared in Comparative Examples 2-2 (Comparative Example 3-2) and 2-3 (Comparative Example 3-3) were used. The results are shown in Table 3.